

**IDAPA 37  
TITLE 03  
Chapter 03**

**37.03.03 - RULES AND MINIMUM STANDARDS FOR THE CONSTRUCTION AND  
USE OF INJECTION WELLS IN THE STATE OF IDAHO**

**Revisions to Rules 10 and 25**

**010. DEFINITIONS (Rule 10).**

**01. Abandonment.** The discontinuance of the use of an injection well. See “permanent abandonment,” “temporary abandonment,” and “unauthorized abandonment”. (7-1-93)

**02. Applicant.** Any owner or operator submitting an application for permit to construct, modify or maintain an injection well to the Director of the Department of Water Resources. (7-1-93)

**03. Aquifer.** Any geologic formation that will yield water to a well in sufficient quantities to make production of water from the formation reasonable for a beneficial use, except when the water in such formation results solely from fluids deposited through an injection well. (7-1-93)

**04. Beneficial Use.** A use of water that is reasonable and necessary to the user and is consistent with the interests of the public in the best utilization of water supplies. Beneficial uses include but are not limited to domestic, agricultural, municipal and industrial supplies, stock water, and fish propagation. (7-1-93)

**05. Best Management Practice (BMP).** A practice or combination of practices determined to be the most effective and practicable means of preventing or reducing contamination of ground water and surface water by injection well operation, to achieve water quality goals and protect beneficial uses of ground water. (7-1-93)

**06. Casing.** A conduit required by these rules and Well Construction Standards Rules to maintain the well opening and prevent contamination of ground water. (7-1-93)

**07. Cesspool.** An injection well that receives sanitary waste containing human excreta without benefit of a treatment system or treatment device such as a septic tank. Cesspools have an open bottom and/or perforated sides.

~~07~~**08. Coliform Bacteria.** All of the aerobic and facultative anaerobic, gram-negative, non-spore forming, rod-shaped bacteria that either ferment lactose broth with gas formation within forty-eight (48) hours at thirty-five degrees celsius (35C), or produce a dark colony with a metallic sheen within twenty-four (24) hours on an Endo-type medium containing lactose. (7-1-93)

~~08~~**09. Construct.** To create a new injection well or to convert any structure into an injection well. (7-1-93)

~~09~~**10. Contaminant.** Any chemical, ion, radionuclide, synthetic organic compound, micro-organism, waste or other substance which does not occur naturally in ground water or which naturally occurs at a lower concentration. (7-1-93)

~~10~~**11. Contamination.** The direct or indirect introduction of any contaminant into ground water,

caused in whole or in part by human activity. (7-1-93)

**12.** **Deep Injection Well.** An injection well which is more than eighteen (18) feet in vertical depth below land surface, and is identical to the statutory phrase, “waste disposal and injection well”. (7-1-93)

**13.** **Department.** The Idaho Department of Water Resources. (7-1-93)

**14.** **Director.** The Director of the Idaho Department of Water Resources. (7-1-93)

**15.** **Draft Permit.** The completed Application for Permit with permit conditions, compliance schedules and monitoring requirements attached. (7-1-93)

**16.** **Drinking Water Source.** An aquifer which contains water having less than ten thousand (10,000) mg/l total dissolved solids and has not been exempted from this designation by the Director of the Department of Water Resources pursuant to Rule 75. (7-1-93)

**17.** **Drinking Water Standards.** Refers to current “Idaho Rules for Public Drinking Water Systems” as adopted by the Idaho Department of Environmental Quality (DEQ). They are identical to standards in Part 40 Chapter 141 and 142 of the Code of Federal Regulations. It consists of primary and secondary maximum contaminant levels (MCLs) (see definition). (7-1-93)

**18.** **Drywell.** An injection well, other than an improved sinkhole or subsurface fluid distribution system, completed above the water table so that its bottom and sides are typically dry except when receiving fluids. ( )

**19.** **Endangerment.** Injection of any fluid which exceeds drinking water standards that may result in the presence of any contaminant in ground water which supplies or can reasonably be expected to supply any public or non-public water system, and if the presence of such contaminant may result in such a system not complying with any state primary drinking water standard or may otherwise adversely affect the health of persons or result in a violation of water quality standards that would adversely affect beneficial uses. (7-1-93)

**20.** **Fluid.** Any material or substance which flows or moves, whether in a semisolid, liquid, sludge, gaseous or any other form or state. (7-1-93)

**21.** **Formation.** A body of consolidated or unconsolidated rock characterized by a degree of lithologic homogeneity which is mappable at the earth’s surface or traceable in the subsurface. (7-1-93)

**22.** **Ground Water.** Any water that occurs beneath the surface of the earth in a saturated geological formation of rock or soil. (7-1-93)

**23.** **Hazardous Waste.** Any substance defined by Part 40 Chapter 261.3 of the Code of Federal Regulations. (7-1-93)

**24.** **Improved Sinkhole.** A naturally occurring karst depression or other natural crevice found in volcanic terrain and other geologic settings which has been modified by man for the purpose of directing and emplacing fluids into the subsurface. ( )

**25.** **Injection or Well Injection.** The subsurface emplacement of fluids. The purpose of injection by Class V wells is the temporary or permanent disposal or storage of fluids into subsurface geologic formations. ( )

**26.** **Injection Well or Well.** Any excavation or artificial opening into the ground which meets the following three (3) criteria: ( )

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- a. It is a bored, drilled or dug hole, or is a driven mine shaft or a driven well point; and (7-1-93)
- b. It is deeper than its largest straight-line surface dimension; and (7-1-93)
- c. It is used for or intended to be used for injection. (7-1-93)

Improved sinkholes and subsurface fluid distribution systems that meet the above criteria are injection wells.( )

**2427. Irrigation Waste Water.** Water diverted for irrigation but not applied to crops, or runoff of irrigation tail water from the cropland as a result of irrigation. (7-1-93)

**28. Large Capacity Cesspool.** Any residential cesspool used by a multiple dwelling, community or regional system for the disposal of sanitary wastes (for example: a duplex or apartment building) or any non-residential cesspool that has the capacity to serve twenty (20) or more people per day (for example: a rest stop, campground, restaurant or church). ( )

**2529. Maintain.** To allow, either expressly or by implication, an injection well to exist in such condition as to accept or be able to accept fluids. Unless a well has been abandoned pursuant to the criteria contained in these rules it is considered to be capable of accepting fluids. (7-1-93)

**2630. Maximum Contaminant Level (MCL).** Means the maximum permissible level of a contaminant in water that is delivered to any user of a public water system. MCLs are the basis of the drinking water standards and the water quality standards as applied to injection well operation and protection of beneficial uses of ground water. Primary MCLs are required drinking water quality standards that also constitute waste disposal and injection well operational standards at the wellhead. Secondary MCLs are suggested drinking water quality standards that, in addition to primary MCLs, are indicators of unreasonable contamination of ground water when detected at points of diversion for beneficial use. (7-1-93)

**2731. Modify.** To alter the construction of an injection well, but does not include cleaning or redrilling operations which neither deepen nor increase the dimensions of the well. (7-1-93)

**32. Motor Vehicle Waste Disposal Well.** Injection wells that receive or have received fluids from vehicular repair or maintenance activities, such as an auto body repair shop, automotive repair shop, new or used car dealership, specialty repair shop (e.g., transmission and muffler repair shop), or any facility that does any vehicular repair work. ( )

**2833. Operate.** To allow fluids to enter an injection well by action or inaction of the operator. (7-1-93)

**2934. Operator.** Any individual, group of individuals, partnership, company, corporation, municipality, county, state agency, taxing district, federal agency or other entity that operates or proposes to operate any injection well. (7-1-93)

**3035. Owner.** Any individual, group of individuals, partnership, company, corporation, municipality, county, state agency, taxing district, federal agency or other entity owning land on which any injection well exists or is proposed to be constructed. (7-1-93)

**3136. Perched Aquifer.** Ground water separated from an underlying main body of ground water by an unsaturated zone . (7-1-93)

**3237. Permanent Abandonment.** The discontinuance of use of an injection well in accordance with

current Rules for Well Construction Standards. Permanent abandonment requires plugging the well bore with bentonite grout, cement grout, concrete, puddling clay, or other impermeable material to prevent the upward or downward migration of fluids. (7-1-93)

**3338. Person.** Any individual, association, partnership, firm, joint stock company, trust, political subdivision, public or private corporation, state or federal governmental department, agency or instrumentality, or any other legal entity which is recognized by law as the subject of right and duties (Idaho Code 30-101 EPHA). (7-1-93)

**3439. Point Of Injection.** ~~The deepest point below land surface from which injected fluids leave the bore, hole or shaft of an injection well.~~ last accessible sampling point prior to waste being released into the subsurface environment through a Class V injection well. For example, the point of injection for a Class V septic system might be the distribution box. For a drywell, it is likely to be the well bore itself ( )

**3540. Point Of Diversion For Beneficial Use.** A location such as a producing well or spring where ground water is taken under control and diverted for a beneficial use. (7-1-93)

**3641. Radioactive Material.** Any material, solid, liquid or gas which emits radiation spontaneously. Radioactive geologic materials occurring in their natural state are not included. (7-1-93)

**3742. Radioactive Waste.** Any fluid which contains radioactive material in concentrations which exceed those established for discharges to water in an unrestricted area by the Board of Environmental Quality. (7-1-93)

**3843. Replacement Well.** An injection well constructed to replace an existing injection well, authorized for use under these rules, that meets the following criteria: (7-1-93)

- a. The replacement well is located within two hundred (200) feet of the existing injection well. (7-1-93)
- b. The injected fluids are from the same source as the fluids injected through the existing injection well. (7-1-93)
- c. The injected fluids are of equal or better quality than the fluids injected through the existing well.
- d. Construction features of the replacement well are similar to the features of the existing well and meet or exceed minimum well construction standards. (7-1-93)
- e. The distance between the point of injection and the nearest boundary of the receiving aquifer is at least as great as that distance for the existing injection well. (7-1-93)
- f. The existing injection well is abandoned by an approved method within thirty (30) days of completion of construction of the replacement well. (7-1-93)

**3944. Sanitary Waste.** ~~Any fluid generated through domestic activities, such as food preparation, cleaning and personal hygiene.~~ Any liquid or solid waste originating from humans and human activities, such as wastes collected from toilets, showers, wash basins, floor drains, sinks used for cleaning domestic areas, sinks used for food preparation, clothes washing operations, and sinks or washing machines where food and beverage serving dishes, glasses, and utensils are cleaned. Sources of these wastes may include single or multiple residences, hotels and motels, restaurants, bunkhouses, schools, ranger stations, campgrounds, picnic grounds, day-use recreation areas, commercial and industrial facilities provided the waste is not mixed with commercial or industrial waste. ( )

**4045. Schedule Of Compliance.** A schedule of remedial measures including an enforceable sequence

of actions or operations leading to compliance with the standards. (7-1-93)

46. **Septic System.** An injection well that is used to inject sanitary waste below the surface. A septic system is typically comprised of a septic tank and subsurface fluid distribution system or disposal system. ( )

~~41~~47. **Shallow Injection Well.** An injection well which is less than or equal to eighteen (18) feet in vertical depth below land surface. (7-1-93)

~~42~~48. **State.** The state of Idaho. (7-1-93)

49. **Subsurface Fluid Distribution System.** An assemblage of perforated pipes, drain tiles, or other similar mechanisms intended to distribute fluids below the surface of the ground. ( )

~~43~~50. **Surface Runoff Water.** Runoff water from the natural ground surface and cropland. Runoff from urbanized areas such as streets, parking lots, airports, and runoff from animal feedlots, agricultural processing facilities and similar facilities is not included within the scope of this phrase. (7-1-93)

~~44~~51. **Temporary Abandonment.** The prevention of injection by use of a removable or retrievable device, such as a packer or cap. (7-1-93)

~~45~~52. **Unauthorized Abandonment.** The permanent abandonment of any injection well that has not received the approval of the Department prior to abandonment, or was not abandoned in a method approved by the Director. (7-1-93)

~~46~~53. **Unreasonable Contamination.** Endangerment of a drinking water source or the health of persons or other beneficial uses by injection. See “endangerment”. (7-1-93)

~~47~~54. **Water Quality Standards.** Refers to those standards found in Idaho Department of Environmental Quality Rules, IDAPA 58.01.02, “Water Quality Standards and Wastewater Treatment Requirements”. (7-1-93)

~~48~~55. **Wellhead.** That point, downstream of any filters or treatment devices, where fluids enter the injection well. (7-1-93)

011. -- 024. (RESERVED).

## 025. CLASSIFICATION OF INJECTION WELLS - AUTHORIZATIONS, PROHIBITIONS AND EXEMPTIONS (Rule 25).

01. **Classification Of Injection Wells.** For the purposes of these rules, injection wells are classified as follows: (7-1-93)

a. Class I - Wells used to inject hazardous, radioactive, ~~waste or other~~ industrial, and or municipal wastes beneath the lowermost formation containing a drinking water source. ( )

b. Class II - Wells used to inject fluids which are brought to the surface with conventional oil and gas production, utilized for enhanced recovery of oil or gas, or stored as liquid hydrocarbons at standard temperature and pressure in the injection formation. (7-1-93)

c. Class III - Wells which inject for the extraction of minerals unless used for solution mining in conventional mines. (7-1-93)

d. Class IV - Wells used to inject hazardous or radioactive wastes into or above a formation which

contains a drinking water source. (7-1-93)

e. Class V - All injection wells not included in Classes I, II, III, or IV. (7-1-93)

**02. Subclassification.** Class V wells are subclassified as follows: (7-1-93)

a. \*5A5-Electric Power Generation. (7-1-93)

b. \*5A6-Geothermal Heat. (7-1-93)

c. \*5A7-Heat Pump Return. (7-1-93)

d. 5A8-Aquaculture Return Flow. (7-1-93)

e. \*5A19-Cooling Water Return. (7-1-93)

f. 5B22-Saline Water Intrusion Barrier. (7-1-93)

g. \*5D2-Storm Runoff. (7-1-93)

h. 5D3-Improved Sinkholes. (7-1-93)

i. \*5D4-Industrial Storm Runoff. (7-1-93)

j. \*5F1-Agricultural Runoff Waste. (7-1-93)

k. \*5G30-Special Drainage Water. (7-1-93)

l. 5N24-Low-level Radioactive Waste Disposal. (7-1-93)

m. \*5R21-Aquifer Recharge. (7-1-93)

n. 5S23-Subsidence Control. (7-1-93)

o. 5W9-Untreated Sewage. (7-1-93)

p. 5W10- Cesspools (7-1-93)

q. \*5W11-Septic Systems (General). (7-1-93)

r. \*5W12-Water Treatment Plant Effluent. (7-1-93)

s. \*5W20-Industrial Process Water. (7-1-93)

t. 5W31-Septic Systems (Well Disposal). (7-1-93)

u. \*5W32-Septic System (Drainfield). (7-1-93)

v. \*5X13-Mine Tailings Backfill. (7-1-93)

w. 5X14-Solution Mining. (7-1-93)

x. 5X15-In-Situ Fossil Fuel Recovery. (7-1-93)

- y. 5X16-Spent Brine Return Flow. (7-1-93)
- z. \*5X25-Experimental Technology. (7-1-93)
- aa. \*5X26-Aquifer Remediation. (7-1-93)
- bb. \*5X27-Other Wells. (7-1-93)
- cc. \*5X28-~~Service Station Waste~~ Motor Vehicle Waste Disposal Wells. (7-1-93)
- dd. 5X29-Abandoned Drinking Water Wells. (7-1-93)

\* Wells in these subclasses are currently inventoried in Idaho.

### **03. Authorizations, Prohibitions And Exemptions. (7-1-93)**

a. These rules prohibit the permitting, construction or use of any Class I, II, III or IV injection well, except that wells used to inject contaminated ground water that has been treated and is being injected into the same formation from which it was drawn are authorized by rule for the life of the well if such subsurface emplacement is approved by the United States Environmental Protection Agency (EPA) or an authorized State Agency, pursuant to provisions for cleanup of releases under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), 42 U.S.C. 9601-9675, or pursuant to requirements and provisions under the Resource Conservation and Recovery Act (RCRA), 42 U.S.C. 6901-6992k.

b. Prohibition of injection of hazardous and of radioactive wastes (Class IV) - Construction of a well to be used for injection of hazardous wastes or of radioactive wastes into or above a drinking water source, or injection of hazardous wastes or of radioactive wastes through an existing injection well into or above a drinking water source is prohibited. (7-1-93)

c. Construction and use of Class V deep injection wells may be authorized by permit as approved by the Director. (7-1-93)

d. Construction of large capacity cesspools or motor vehicle waste disposal wells is prohibited. Construction and use of other Class V shallow injection wells are authorized by these rules without permit provided that:

- i. Required inventory information is submitted to the Director pursuant to Rule 30. (7-1-93)
- ii. Use of the well shall not result in unreasonable contamination of a drinking water source or cause a violation of water quality standards that would affect a beneficial use. (7-1-93)

e. Class V shallow injection wells used for the disposal of waste water as defined in Idaho Department of Environmental Quality Rule, IDAPA 58, Title 01, Chapter 03, "Individual/Subsurface Sewage Disposal Rules," are exempt from the authorization requirements of these rules, but are subject to the IDAPA 58.01.03.000, et seq., "Individual/Subsurface Sewage Disposal Rules," Title 39, Chapter 1 and Title 39, Chapter 36, Idaho Code. (7-1-93)

f. State or local entities involved in highway and street construction and maintenance are exempt from the permit requirements for shallow class V wells, but shall comply with the inventory requirements of these rules. (7-1-93)

g. Mine tailings backfill (5X13) wells are authorized by rule as part of mining operations because Federal studies show the threat of endangerment from use of these wells is low. They are therefore exempt from the drinking water standards and permitting requirements of these rules provided that their use is limited to the injection of mine tailings only. The use of any 5X13 well(s) shall not result in water quality standards at points of beneficial use being exceeded or otherwise affect a beneficial use. Should water quality standards be exceeded or beneficial uses be affected, the Director may order the wells to be put under the permit requirements of these rules, or the wells may be required to be remediated or closed. As a condition of their use, the Director may require the construction of monitoring wells and the conduction of monitoring activities by the owner/operator. 5X13 wells are subject to the inventory requirements of Rule Subsection 030.01. (7-1-93)

h. Currently used or existing large capacity cesspools shall be properly abandoned by April 5, 2005.  
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i. Currently used or existing motor vehicle waste disposal wells shall be properly abandoned by January 1, 2007.  
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**026. -- 029. (RESERVED).**